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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,375	12/18/2001	Lawrence J. DaQuino	10010792-1	2452

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Gordon Stewart
Agilent Technologies, Legal Department, DL429
Intellectual Property Adiministration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER	
LAM, ANN Y	

ART UNIT	PAPER NUMBER
1641	

MAIL DATE	DELIVERY MODE
08/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/023,375	DAQUINO ET AL.	
	Examiner	Art Unit	
	ANN Y. LAM	1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17 and 29-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17, 29-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-17 and 29-41 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 6 and 19 of U.S. Patent No. 7,128,398, (hereinafter Patent '398) in view of Kneezel et al. 5,939,206.

Patent '398 recites in claim 1:

A pulse jet printhead assembly comprising: (a) a multiple die printhead comprising: (i) an orifice plate comprising a plurality of orifices; and (ii) a plurality of printhead dies present on a surface of said orifice plate in operational alignment with said orifices to produce at least one firing

chamber; and (b) a multiple reservoir housing affixed to said multiple die printhead, said housing further comprising at least one of the following: (i) reservoir walls that are sufficiently high to prevent cross-contamination of samples among reservoirs of said housing; or (ii) at least one discontinuity at a reservoir housing printhead mating surface that prevents

Claim 6 of Patent '398 further recites that the jet printhead assembly is a thermal pulse jet printhead assembly.

Thus, Patent '398 claims all the limitations of claim 1 of the present application except for specifying that the printhead dies each comprise resistors.

However, Kneezel et al. disclose a thermal printhead and further disclose resistive materials that are used to heat the and thus fire materials from the thermal printhead (col. 20, lines 36-37, and col. 1, lines 32-25.)

Thus, it would have been obvious to the skilled artisan to utilize resistive materials in the thermal printhead of Patent '398 as it is known in the art that resistive materials are used as the heating elements to fire materials in thermal printheads, as shown by Kneezel et al.

As to claims 2-4, 11-13 and 31-33 of the present invention, see claim 4 of Patent '398.

As to claims 5 and 14 of the present invention, see claim 6 of Patent '398.

As to claims 6-7, 15-17 and 30 of the present invention, see claim 19 of Patent '398.

As to claim 8-10 and 35-38 of the present invention, see claims 1and 2 of Patent '398.

As to claims 29 and 30 of the present invention, see discussion of claim 1 above.

As to claim 34 of the present invention, Patent '398 does not claim that the resistive material is on a semiconductor substrate. However, Kneezel et al. disclose this (see abstract.) It would have been obvious to the skilled artisan to use semiconductor in the invention of Patent '398 as Kneezel et al. disclose that this material is useful in forming a thermal printhead.

As to claim 39-41 of the present invention, Patent '398 does not claim that the printhead dies are parallel to each other, however, Kneezel et al. disclose in figure 2 that the multiple printhead dies are parallel to each other. Thus it would have been obvious to the skilled artisan that this configuration can also be applied to the thermal printhead of Patent '398.

Response to Arguments

Applicant's response of July 22, 2008 has been considered and is found persuasive. Applicant has pointed to the specification in support of the printhead dies being separate entities, and Applicant has also asserted that the intended meaning of the claim terms is that the printhead dies are separate entities. Thus, Examiner interprets the claims accordingly. Kneezel et al. does not teach the printhead dies as separate pieces and, excluding Patent '398 mentioned above, there is no motivation

elsewhere in the prior art to produce separate printhead dies bonded to a single orifice plate with a plurality of orifices.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANN Y. LAM whose telephone number is (571)272-0822. The examiner can normally be reached on Mon.-Fri. 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Shibuya can be reached on 571-272-0806. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ann Y. Lam/
Primary Examiner, Art Unit 1641